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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,580	08/21/2003	Anil K. Nori	MSFT-2735/305642.01	9948

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER
CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
2162	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 December 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>1/19/07</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1.   This office action is in response to the amendment filed on December 15, 2006, in which

claims 1-18 are presented for further examination.

Information Disclosure Statement

2.   The information disclosure statement (IDS) filed on January 19, 2007 complies with the

provisions of M.P.E.P 609. It has been placed in the application file. The information referred to

therein has been considered as to the merits.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-17 have been considered but are moot in

view of the new ground(s) of rejection necessitated by amendment.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

5.   Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter, specifically, as directed to an abstract idea.

It appears that the data store, recited in claims 1 and 10, is a data structure that represents a

descriptive material per se. such data structure is not claimed as embodied in computer-readable

media to form the basis statutory under 35 USC 101 because it is not capable of causing

functional change in the computer (See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at

1760). Such claimed data structure does not define any structural and functional

interrelationships between the data structure and other claimed aspects of the invention, which

permit the data structure's functionality to be realized. Claims 1-11 also are directed to an

abstract idea that is not tied to a technological art, environment or machine which would produce

a concrete and useful result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8.   Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et

al., (hereinafter "Agrawal ") US Patent no. 6,324,533 and Martin US Patent no. 6,704,743.

As to claim 1, Agrawal is directed to a system for mining relationship from the integrated mining

system in a form of query to SQL engines enhanced with object relational extensions (col.2, lines

33-36). In particular the claimed "a data store" (col.) that comprises an item (item is an object, col.2, lines 40-60; col.4, line 66; col.5, lines 5-20), wherein said Item is a unit of data storable in a data store" (wherein the object is stored in a medium, col.8, lines 2-18). However, Agrawal does not explicitly discloses "a Core Schema that defines a set of core types, wherein each Item is characterized into at least one core type based on the Item type or the Item subtype, the characterizations being stored in the data store".

On the other hand, Martin discloses an entity management system using the concept of database seeding. However, the core schema disclosed by Martin is not configured to include at its most basic level the concept of object inheritance, but such concept is introduced by creating a parent definition entity in the database as a way to define the characteristics of a parent relationship between a parent and child entity (see fig.61). In particular, Martin discloses the claimed "a Core Schema that defines a set of core types, wherein each Item is characterized into at least one core type based on the Item type or the Item subtype, the characterizations being stored in the data store" (col.25, lines 26-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references. One having ordinary skill in the art would have found it motivated to use such modification for the purpose of minimizing the performance impact of changes to the structure of parent entities.

As to claim 2, Agrawal discloses the claimed "a plurality of Items, said plurality of Items comprising an Item Folder and at least one other Item that is a member of said Item Folder" (col.9, lines 25-60).

As to claim 3, Agrawal discloses the claimed "a plurality of Items, said plurality of Items

comprising a Category and at least other one Item that is a member of said Category" (col.12,

lines 48-55).

As to claim 4, Agrawal discloses the claimed "wherein a Relationship between two Items is

established automatically by a hardware/Software interface system" (col.7, lines 15-60). (This

claim should not be part of the rejection because is not selection from at least claimed element in

claim 1)

As to claim 5, discloses the claimed "wherein said Element is understandable by a

hardware/software interface system." (col.8, lines 8-18). (This claim should not be part of the

rejection because is not selection from at least claimed element in claim 1)

As to claim 6, discloses the claimed "a second Element, and wherein said Relationship comprises

said second Element" (col.7, lines 15-25). (This claim should not be part of the rejection because

is not selection from at least claimed element in claim 1)

As to claim 7, Martin discloses the claimed a Core Schema to define a set of Core Items by

which a hardware/software interface system understands and directly processes said set of Core

Items in a predetermined and predictable way (col.25, lines 26-37).

As to claim 8, Martin discloses the claimed " wherein each Item from the set of Core Items is

derived (directly or indirectly) from a Common Single Base Item" ((col.25, lines 26-37)).

As to claim 9, Martin discloses the claimed "wherein said Common Single Base Item is a

foundational Item in a Base Schema" ((col.25, lines 26-37)).

As to claim 10-11:

Claims 10-11 are computer readable medium with computer readable instructions for performing

the data store claims 1-9 above. They are, therefore, rejected under the same rationale.

As to claim 12, discloses the claimed "a plurality of Elements where each Element from among

said plurality of Elements constitutes an instance of a type comprising one or more fields" (col.2,

lines 40-60; col.4, line 66; col.5, lines 5-20; "a plurality of Items where each Item from among

said plurality of Items constitutes a discrete storable unit of information that can be manipulated

by a hardware/software interface system, and wherein each said Item comprises at least one

Element" (col.10, lines 13-38); "plurality of Relationships where each Relationship form among

said plurality of Relationships is a link between at least two Items" (col.9, lines 25-60); "a data

store, said data store comprising said plurality of Item, said plurality of Elements, and said

plurality of Relationships" (col.10, lines 15-60; and "a storage platform for managing said data

store and for manipulating said plurality of Items" (col.9, lines 25-60). However, Agrawal does

not explicitly discloses "a Core Schema that defines a set of core types, wherein each Item is

characterized into at least one core type based on the Item type or the Item subtype, the

characterizations being stored in the data store".

On the other hand, Martin discloses an entity management system using the concept of

database seeding. However, the core schema disclosed by Martin is not configured to include at

its most basic level the concept of object inheritance, but such concept is introduced by creating

a parent definition entity in the database as a way to define the characteristics of a parent

relationship between a parent and child entity (see fig.61). In particular, Martin discloses the

claimed "a Core Schema that defines a set of core types, wherein each Item is characterized into

at least one core type based on the Item type or the Item subtype, the characterizations being

stored in the data store" (col.25, lines 26-37). It would have been obvious to one having ordinary

skill in the art at the time the invention was made to combine the teachings of the cited

references. One having ordinary skill in the art would have found it motivated to use such

modification for the purpose of minimizing the performance impact of changes to the structure of

parent entities.

As to claim 13, discloses the claimed "wherein each Item from among said plurality of Items

belongs to at least one Item Folder from among a plurality of Item Folders, and wherein each

said Item may belong to more than one Item Folder from among said plurality of Item Folders"

(col.12, lines 35-65).

As to claim 14, discloses the claimed "wherein the deletion of said Item Folder does not automatically result in the deletion of said Item" (col.7, lines 15-62).

As to claim 15, Agrawal discloses the claimed "wherein an Item is automatically deleted when it no longer belongs to any Item Folder" (col.8, lines 3-18).

As to claim 16, Agrawal discloses the claimed "wherein said Item is automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted" (col.9, lines 25-60).

As to claim 17, Agrawal discloses the claimed "wherein an Item is automatically a member of a default Item Folder"(col.10, lines 15-40).

As to claim 18, Agrawal discloses the claimed "wherein said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder" (col.10, lines 15-35)

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

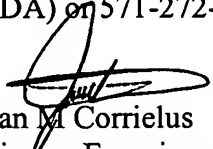Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.

The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jean M Corrielus
Primary Examiner
Art Unit 2162

March 16, 2007